

CLAIMS

1. A flow sensor comprising
a housing with at least two housing sections and
forming a measuring conduit between at least some of said
housing sections,
a semiconductor chip comprising a sensor element
arranged at a wall of the measuring conduit,
a sealing ring arranged between two of said hous-
ing sections and surrounding said semiconductor chip, said
sealing ring pressing against a support formed by at least
one of said housing sections, and
at least one strip conductor connected to the
semiconductor chip and extending between said support and
said sealing ring and out of said housing.
2. The flow sensor of claim 1 wherein said seal-
ing ring is pressed against said strip conductor.
3. The flow sensor of claim 1 wherein said strip
conductor is arranged on one of said housing sections.
4. The flow sensor of claim 3 further comprising
a printed circuit board forming at least part of one of said
housing sections, wherein said strip conductor is arranged on
said printed circuit board.
5. The flow sensor of claim 4 wherein the printed
circuit board is arranged between the sealing ring and the
support.
6. The flow sensor of claim 1 further comprising
a flexible support foil wherein said strip conductor is ar-
ranged on said support foil.
7. The flow sensor of claim 1 wherein said meas-
uring conduit is formed by a groove in a surface of at least
one of the housing sections, wherein said sealing ring sur-

rounds said groove, said flow sensor comprising at least two connecting ducts extending through at least one of said housing sections and communicating with said measuring duct.

8. The flow sensor of claim 7 wherein said sealing ring is arranged at said surface.

9. The flow sensor of claim 7 wherein said sealing ring is arranged in a recess in said surface.

10. The flow sensor of claim 1 wherein said measuring conduit is formed by a groove in a surface of a first housing section,

and wherein said semiconductor chip is arranged in a recess in a surface of a second housing section, is flush with a wall of the measuring conduit, and contacts said first housing section.

11. The flow sensor of claim 10 further comprising at least one spacer between said semiconductor chip and a bottom of said recess, said spacer being deformed by a force exerted by said first housing section on said semiconductor chip.

12. The flow sensor of claim 11 wherein said spacer comprises a plurality of bumps located in said bottom of said recess and comprising tips, said tips being deformed by said force.

13. The flow sensor of claim 12 wherein said bumps are an integral part of said second housing section.

14. The flow sensor of claim 10 wherein said recess comprises a side wall parallel to said measuring conduit, said side wall ending in recessed sections, such that said side wall forms a straight stop for positioning the semiconductor chip in a direction perpendicular to said measuring conduit.

15. The flow sensor of claim 1 further comprising a sealant paste arranged at a crossing of said strip conductor and said sealant ring.

16. The flow sensor of claim 1 wherein said semiconductor chip comprises a membrane, wherein said sensor element is arranged at least partially on said membrane, and wherein both sides of said membrane are in contact with said conduit such that a pressure drop over said membrane is substantially zero.

17. The flow sensor of claim 1 wherein said semiconductor chip is arranged closer to an exit end than to an entry end of the measuring conduit.